**K-5 Math Lesson Plan**

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| **Teacher: Sams** | | | **Grade: 5th** | | | **Date(s)**: 1 day |
| **Unit Title:** Unit 1-Understanding the Decimal Place Value System | | | | **Corresponding Unit Task:** Taught prior to performance task 4. This could be culminating game right before task. | | |
| **Essential Question(s):** How does a digit’s position affect its value? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  -1 set of decimal in between cards per pair  -timer (online if accessible)  -base ten blocks  -student pairs (homogeneous) | | **Student:**  -sheet of paper for end of lesson response  -pencil  -base ten blocks as needed | | | Tenths  hundredths  thousandths  place value  number name  greater than (>)  less than (<)  equal to (=)  compare/comparison  decimal/decimal point | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**   |  | | --- | | 5.NBT.1  *Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.* |  |  | | --- | | 5.NBT.3b  *Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.* |  |  | | --- | | 5.NBT.3a  *Read and write decimal numbers to thousandths using base-ten, number name, expanded form.* | | | | | | |
| **I Can Statement(s):**  -I can recognize a digit in one place represents 10 times as much as the place to its right.  -I can recognize A digit in one place represents 1/10 of the place to the left.  -I can read decimals to the thousandths using number names.  -I can read decimals to the thousandths using expanded form. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  -Engage the students in a class game of decimal war. Play teacher vs. class. Really embellish how good you are and how bad you are going to beat them (this is always a really good way to get everyone engaged ☺ ).  -Using a set of the decimal cards they will use later, divide them evenly between you and the class.  -Call one student up and play war (each person flips over a card from their pile)  -determine who has the highest decimal. The person with the highest decimal gets to keep both cards.  -there is a catch though. The person with the highest card must explain how they know theirs is the highest. If they cannot explain why, then they do not get the two cars, the other person does. If the person representing the class has the higher card, call on someone from the class to answer why the class number is the highest.  -Play this game for 10 minutes and then determine a winner! | | | | | |
| **Teacher Directed:**  -model for the students how to play the game “Decimal in Between.” (Adapted from Math Investigations Decimal Games)  -Have a student play with you. Choose a student whom you feel has a very firm grasp on ordering decimals and decimal place value.  -Think out loud during the modeling of the game.  -To start the game lay out the .1 card, the .5 card and the .9 card to form a number line.  -place all other cards face down. Then the teacher draws the first card.  -After looking at the card determine what two numbers it fits in between and where the card fits in between those two numbers.  -For example if the first card drawn was .125 the think aloud would sound something like this “I know that .125 is in between .01 and .5 because it has 1 tenth and 1 tenth is between 0 tenths and 5 tenths. I also know that .125 is closer to .01 than .5 because it has just 1 tenth. So I know that .125 goes right beside .01.”  -Then have the student do the same thing. Their card might be .45 and therefore would be placed right beside .5.  -VERY IMPORTANT-Now when the teacher draws the next card they have to determine whether it is in between .125 and .45, or .5 and .9. The two new cards placed from the last round force the students to deal with new decimal numbers in which they will compare their card to and fit it in between.  -For example, if the second card the teacher drew was .1 the think aloud would sound something like this “I know that .1 is in between .01 and .125 because it has 1 tenth which makes it greater than .01 but has no hundredths which makes it less than .125. However, I cannot play this card because there is no space in between those two cards.”  -NOTE🡪if two decimals are equivalent the card is played right on top of the equivalent card.  -In this situation the teacher could not play their card, so they would have to keep it. Continue going back and forth placing cards until you have made it all the way through the deck.  -The person with the least amount of cards they couldn’t play, wins.  -the think aloud by the teacher each time they play here is IMPERATIVE. | | | | | |
| **Guided Practice/Independent Practice;**  **-**Guided and independent are together in this lesson because as you monitor the room you will be guiding and allowing them to work independently as they play the game.  -divide students into homogeneous pairs  -give them a set of cards.  -release students to play the game with their partner. | | | | | |
| **Closing/Summarizing Strategy:**  -At the end of the game time, have the students go back to their seats and write down 2 things: 1. Something new they learned today or feel like they mastered, 2. Something they still need help with. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| -Give students the whole set of cards. This includes decimal numbers beyond thousandths. | | | -Only give students a partial set of the cards🡪could be only decimals through the tenths, hundredths or thousandths depending on the need of the student (whole set includes extension cards)  -only have students place cards in order from least to greatest rather than doing the in between component. | | | -Only give students a partial set of the cards🡪could be only decimals through the tenths, hundredths or thousandths depending on the need of the student (whole set includes extension cards)  -have base 10 blocks available to use for modeling to help determine order of decimals  -only have students place cards in order from least to greatest rather than doing the in between component. |
| **Assessment(s):**  Informal Assessment-student discourse in decimal war, and fraction in between game, student response about mastery, learning and help. | | | | | | |
| **Teacher Reflection:** (Next steps?)  -Can students use multiple methods to determine order of decimals?  -As I near the end of the unit what concepts do I need to review?  -Students misconceptions/understandings | | | | | | |